DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 99.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-025155

Address: 333 Burma Road **Date Inspected:** 20-Nov-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai

CWI Name: Tian Lei **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** OBG

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector R. Hernandez was present during the time noted above and conducted observations relative to the work being performed.

The QA Inspector randomly observed the following work in progress:

Bay Number 1

FCAW welding of fillet welds located on Traveler Rails components identified as 20TR2-037 as identified on critical weld repair data sheet B-CWR-1568. Welder is identified as welder no. 069896. The welding variables recorded by ZPMC QC identified as Tian Lei appeared to comply with applicable WPS(s) WPS-345-FCAW-1G(1F)-repair-1.

FCAW welding of fillet welds located on Barrier Rails components identified as E2-SB5-035 weld number(s) 001~012. Welder is identified as welder no. 062493. The welding variables recorded by ZPMC QC identified as Tian Lei appeared to comply with applicable WPS(s) WPS-B-T-2133-3.

FCAW welding of fillet welds located on Barrier Rails components identified as E2-SB1D-047 weld number(s) 001~012. Welder is identified as welder no. 067550. The welding variables recorded by ZPMC QC identified as Tian Lei appeared to comply with applicable WPS(s) WPS-B-T-2133-3.

FCAW welding of fillet welds located on Barrier Rails components identified as E2-SB1D-030 weld number(s)

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

126~131. Welder is identified as welder no. 068916. The welding variables recorded by ZPMC QC identified as Tian Lei appeared to comply with applicable WPS(s) WPS-B-T-2132-3.

FCAW welding of fillet welds located on Barrier Rails components identified as E2-SB1-049 weld number(s) 126~131. Welder is identified as welder no. 068554. The welding variables recorded by ZPMC QC identified as Tian Lei appeared to comply with applicable WPS(s) WPS-B-T-2132-3.

FCAW welding of fillet welds located on Barrier Rails components identified as E2-SB1-045 weld number(s) 001~012. Welder is identified as welder no. 216575. The welding variables recorded by ZPMC QC identified as Tian Lei appeared to comply with applicable WPS(s) WPS-B-T-2133-3.

Bay Number 2

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. All components were as listed on NWIT notification no.(s) 07429. The member(s) is/are identified as OBG Longitudinal Diaphragm assembly. The weld designations reviewed are as follows:

- 1. LD3048-001-044, 046, 065, 067.
- 2. FB3329-001-011, 012.

Performed verification VT for the component(s) identified as OBG Floor Beam component listed as FB3317-001. This QA inspector signed green tag #15239.

FCAW welding of fillet weld joint(s) located on lift 14 OBG sub assembly component identified as SA3446-001 weld number(s) 013, 014, 016, 017, 022, & 023. Welder(s) are identified as welder no.(s) 207465. The welding variables recorded by ZPMC QC identified as Tian Lei appeared to comply with applicable WPS(s) WPS-B-T-2132-3.

ZPMC personnel heat straightening Orthotropic Box Girder (OBG) Anchorage Plate component identified as AP3032-001. Distortion appeared to be caused by welding. ZPMC Quality Control (QC) inspector identified as Mr. Tian Lei was present to monitor the heat straightening process. The heat straightening appeared to comply with Heat Straightening Report (HSR) no. HSR1(B)-9855.

Bay Number 3

FCAW welding of complete joint penetration weld joint(s) located on lift 14 OBG longitudinal diaphragm component identified as LD3040-001 weld number(s) 065, 067, & 045. Welder(s) are identified as welder no.(s) 206623. The welding variables recorded by ZPMC QC identified as Tian Lei appeared to comply with applicable WPS(s) WPS-B-T-2233-TC-U4b-F and WPS-B-T-2232-TC-U5-F.

Bay Number 4

This inspector did not observe any welding or contract work in this bay today.

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

Unless otherwise noted above all items observed on this day appeared to be in general compliance with the applicable contract documents

Summary of Conversations:

Pertinent conversations are included in the body of the report.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 1500-0042-02372, who represents the Office of Structural Materials for your project.

| Inspected By: | Hernandez,Rene | Quality Assurance Inspector |
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| Reviewed By: | Hall,Steven | QA Reviewer |